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$R^3, R^4, R^5, R^6, R^7$  are identical or different and are each

- a) hydrogen
- b) a straight-chain or branched alkyl radical (with or without asymmetric carbon atoms) having 1 to 16 carbon atoms, where
  - b1) one or more nonadjacent and nonterminal  $CH_2$  groups may be replaced by  $-O-$  and/or
  - b2) one or two  $CH_2$  groups may be replaced by  $-CH=CH-$ ,

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- c)  $R^4$  and  $R^5$  together may alternatively be  $-(CH_2)_4-$  or  $-(CH_2)_5-$  if they are attached to an oxirane, dioxolane, tetrahydrofuran, tetrahydropyran, butyrolactone or valerolactone system;

$R^{12}$  is hydrogen or a straight-chain or branched alkyl radical (with or without asymmetric carbon atoms) having 1 to 16 carbon atoms, where one or more H may be replaced by F and one or two non-adjacent nonterminal  $-CH_2-$  groups may be replaced by  $-O-$

$Z^1, Z^2, Z^3, Z^4, Z^5, Z^6$  are each, independently of one another, H or F

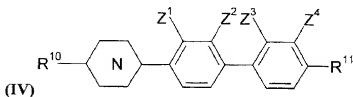


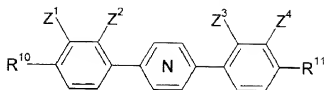
is a bivalent radical selected from the group consisting of pyridine-2,5-diyl, unsubstituted or monosubstituted by F, pyrimidine-2,5-diyl, unsubstituted or monosubstituted by F, pyrazine-2,5-diyl, unsubstituted or monosubstituted by F,



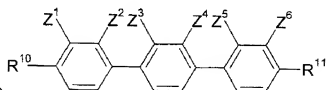
is a bivalent radical selected from the group consisting of cyclohexane-1,4-diyl, unsubstituted or monosubstituted by CN,  $CH_3$ , or disubstituted by F, cyclohex-1-ene-1,4-diyl, perfluorocyclohexane-1,4-diyl, cyclohex-2-ene-1,4-diyl, 1-alkyl-1-silacyclohexane-1,4-diyl, bicyclo[2.2.2]octane-1,4-diyl.

8. A display as claimed in one of claims 1 to 6, wherein the liquid-crystal mixture is composed of 3 to 30 compounds and comprises at least one compound of the formula (I) and at least one compound of the formula (II) and at least one additional compound, selected from the group consisting of (III), (IV), (V), (VI), (VII), where the compounds of the formulae (II) and (III) are as defined in claim 7,

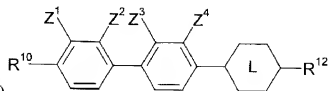




(V)



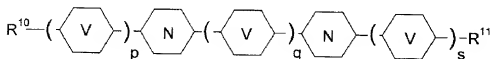
(VI)



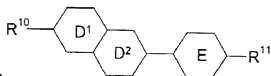
(VII)

where the symbols and indices are as defined in claim 7.

- 5 9. A display as claimed in one of claims 1 to 8, wherein the liquid-crystal mixture is composed of 3 to 30 compounds and comprises at least one compound of the formula (I) and at least one compound of the formula (II) and at least one additional compound selected from the group consisting of (VIII), (IX), (X), (XI), (XII), (XIII), (XIV), (XV), (XVI), (XVII), where the compounds of the formulae (II) and (III) are as defined in claim 7,
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(VIII)



(IX)